

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
2 June 2005 (02.06.2005)

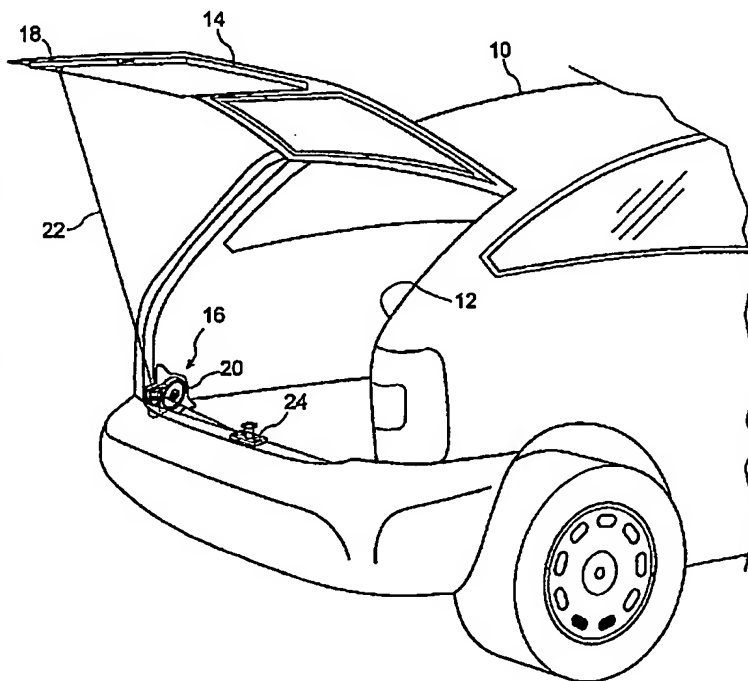
PCT

(10) International Publication Number
WO 2005/049947 A1

- (51) International Patent Classification⁷: E05F 11/12
Clarke, G. [US/US]; 4401 Deacon Court, Troy, MI 48098 (US).
- (21) International Application Number: PCT/CA2004/002008 (74) Agents: PORAT, Alex et al.; Magna International INC., 337 Magna Drive, Aurora, Ontario L4G 7K1 (CA).
- (22) International Filing Date: 22 November 2004 (22.11.2004) (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/523,617 20 November 2003 (20.11.2003) US
- (71) Applicant (*for all designated States except US*): INTIER AUTOMOTIVE CLOSURES INC. [CA/CA]; 521 Newpark Boulevard, Newmarket, Ontario L3Y 4X7 (CA).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): OBERHEIDE, (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: SYSTEM FOR POWER CLOSING OF A SELF RISING CLOSURE PANEL



(57) Abstract: A power closing assembly operates a closure panel hingedly secured to a motor vehicle. The power closing assembly includes an actuator mounted to the motor vehicle, a movable striker also mounted to the motor vehicle to receive the closure panel's latch, and a rotary power cable connecting therebetween. The actuator has a closure cable on a spooling drum extending to the closure panel for closing from an open position when the actuator operates. The movable striker moves between a nominal inboard position and an outboard position. A rotary power cable connects between a provided output on the actuator and an input on the striker so that the striker's movement is powered and synchronized by the actuator. With the closure panel open, the actuator begins a closing cycle by driving in a direction to spool in the closure cable extending to the closure panel. The actuator's direction, using the rotary power cable, simultaneously

causes the striker to move outboard. When the closure panel is pulled completely closed, the striker has also moved to its outboard position whereupon the closure panel's latch readily receives and engages the striker. Upon engagement the actuator reverses its drive direction. This reverse direction causes both the actuator to reset with respect to its closure cable spooling drum and the rotary power cable to turn in the other direction causing the striker to return to its inboard position and fully close the closure panel against its seal load.



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.